

Claims 6, 11, and 24-28 were rejected under 35 U.S.C. § 112, second paragraph, for indefiniteness. These claims have been amended, where considered appropriate, in an effort to address the Examiner's concerns. In view of these amendments, reconsideration and withdrawal of this rejection are respectfully requested.

Claims 1-3, 7-10, 13, 14, 21, and 22 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,151,008 to Kirkpatrick ("Kirkpatrick"). Claims 1-6 were also rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 5,223,453 to Sopor ("Sopor"). Claims 11, 12, 15, 16, and 23 were further rejected under Section 103(a) as being obvious over Kirkpatrick. Claims 17-20 and 43-46 (apparently) were rejected under Section 103(a) as being obvious over Kirkpatrick in view of U.S. Patent No. 6,100,463 to Ladd et al. ("Ladd"). Claims 24-28 were rejected under Section 103(a) as being obvious over Kirkpatrick in view of U.S. Patent No. 6,300,256B1 to Kriegel et al. ("Kriegel"). These rejections are respectfully traversed.

According to exemplary embodiments, a technique is provided for laser sintering of particles in a material into a conjoined structure and for enhancing adhesion of the material to a substrate without damaging the substrate.

For example, claim 1 recites a sintering method comprising providing a material on a substrate, completely sintering the material on the substrate, and enhancing adhesion of the material to the substrate without damaging the substrate. Claim 1 has been amended to clarify that the material includes individual particles, and the step of sintering includes completely sintering the individual particles within the material together.

The Action relies on Kirkpatrick for all the features recited in claim 1. Kirkpatrick discloses thermal processing of selected regions of a semiconductor device. The thermal processing techniques described in Kirkpatrick include, for example, sintering or alloying of metal-semiconductor interfaces. See col. 5, ll. 55-58 of Kirkpatrick. Nowhere in Kirkpatrick is there a disclosure or suggestion of sintering the individual particles within the material together

on the substrate as recited in amended claim 1. Therefore, claim 1 is considered allowable over Kirkpatrick.


The Action also relies on Sopori for all the features recited in claim 1. Sopori discloses a sintering/alloying processing using one-directional reverse illumination. In Sopori, metal strips are sintered onto the top surface of a semiconductor, and a metal contact layer is alloyed to the bottom surface of the semiconductor. See col. 5, ll. 26-37. Sopori, like Kirkpatrick, fails to disclose or suggest sintering individual particles within a material together on the substrate as recited in amended claim 1. Therefore, claim 1 is considered allowable over Sopori.

Claims 2-28 and 43-46 depend ultimately from claim 1 and are considered allowable for at least the same reasons.

For the foregoing reasons, claims 1-28 and 43-46 are considered allowable. A Notice to this effect is respectfully solicited. If any questions remain, the Examiner is invited to contact the undersigned attorney at the telephone number given below.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: BOX AMENDMENT, Commissioner for Patents, Washington, D.C. 20231, on the date indicated below.



Jennifer Pearson Medlin

Date 7/3/02